

Appl. No. 09/655,091
Amdt. dated 4/14/08
Reply to Office action of 1/14/08

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-4, 7-10 and 15-20 remain in the application. Claims 1-4, 7-10 and 15-16 are subject to examination and claims 17-20 have been withdrawn from examination. Only withdrawn claim 17 has been amended. No claims have been added or canceled herein.

In "Claim Rejections – 35 USC § 102," item 3 on page 5 of the above-identified Office Action, claims 1-4, 7-8 and 15-16 have been rejected as being fully anticipated by U.S. Patent No. 4,022,655 to Gaouditz et al. (hereinafter Gaouditz) under 35 U.S.C. § 102(b).

In "Claim Rejections – 35 USC § 103," item 4 on page 5 of the Office Action, claims 9 and 10 have been rejected as being obvious over Gaouditz alone or in view of U.S. Patent No. 5,303,274 to Sawyer under 35 U.S.C. § 103(a).

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and, therefore, the rejected claims have not been amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful. Claim 1 calls for, *inter alia*, a containment vessel of a nuclear power plant, comprising:

Appl. No. 09/655,091
Amdt. dated 4/14/08
Reply to Office action of 1/14/08

an interior space;

a condensing chamber disposed in said interior space, said condensing chamber being filled to a filling level with a cooling liquid;

a pressure chamber disposed in said interior space, said pressure chamber having a top region;

a condenser disposed in said interior space;

a condensing pipe leading into said condensing chamber for enabling overflow of vapor in the condensing chamber; and

a drain pipe for noncondensable gases, said drain pipe disposed in said interior space and fluidically connecting said top region of said pressure chamber to said condensing chamber, said drain pipe defining a direct connection to said condensing chamber, and said drain pipe not connected to said condenser, said drain pipe having an upper end disposed at a level above said condenser and a bottom end immersed into said cooling liquid;

said condenser and said upper end of said drain pipe being disposed in said pressure chamber, and said upper end of said drain pipe being disposed to permit the noncondensable gases to be led off from atmosphere surrounding said condenser and thermally interacting with said condenser.

Independent claim 2 calls for, *inter alia*, a containment vessel of a nuclear power plant, comprising:

an interior space;

a condensing chamber disposed in said interior space, said condensing chamber being filled to a filling level with a cooling liquid;

a pressure chamber disposed in said interior space;

a condenser disposed in said pressure chamber;

a region around said condenser;

Appl. No. 09/655,091
Amdt. dated 4/14/08
Reply to Office action of 1/14/08

a condensing pipe leading into said condensing chamber for enabling overflow of vapor in the condensing chamber; and

a drain pipe for noncondensable gases, said drain pipe fluidically connecting said region around said condenser to said condensing chamber, and said drain pipe having a top end disposed above said condenser, and said drain pipe defining a direct connection to said condensing chamber, and said drain pipe not connected to said condenser, said drain pipe having an upper end disposed at a level above said condenser and a bottom end immersed into said cooling liquid,

said condenser and said upper end of said drain pipe being disposed in said pressure chamber, and said upper end of said drain pipe being disposed to permit the noncondensable gases to be drawn off from atmosphere surrounding said condenser and thermally interacting with said condenser.

Thus, claims 1 and 2 both call for the condenser being disposed in (not merely connected to) the pressure chamber.

Claims 1 and 2 also call for the drain pipe having a top end disposed above the condenser, being fluidically connected to a region around the condenser and defining a direct connection (not through other elements) to said condensing chamber.

It will be shown below that these structural limitations, which were previously in claims 1 and 2, are not found in Gaouditz.

Appl. No. 09/655,091
Amdt. dated 4/14/08
Reply to Office action of 1/14/08

The reference discloses an enclosure 7 which the Examiner relies upon to show the a pressure chamber of claims 1 and 2, condenser coil 37 which the Examiner relies upon to show the condenser of claims 1 and 2 and a condensing volume 11 which the Examiner relies upon to show the condensing chamber of claims 1 and 2. See the paragraph bridging pages 2 and 3 of the Office Action dated July 31, 2007 and incorporated into the Office Action dated January 14, 2008.

**A. Gaouditz Does Not Show Or Suggest A Condenser Disposed
In A Pressure Chamber**

Although the Examiner has gone to great lengths in explaining how element 31 connects the condenser coil 37 to the enclosure 7 in Gaouditz, the gone to great lengths in explaining how element 31 connects the condenser 37 is unquestionably not disposed in the enclosure 7.

Thus, Gaouditz cannot meet the claim recitations calling for:

"said condenser ... disposed in said pressure chamber" in claims 1 and 2;
nor

"a pressure chamber disposed in said interior space" and "a condenser disposed in said interior space" of claim 1; nor

"a condenser disposed in said pressure chamber" of claim 2.

The Gaouditz condenser coil 37 is not physically in the enclosure 7.

**B. Gaouditz Does Not Show Or Suggest A Drain
Pipe Directly Connected to a Condensing Chamber**

Gaouditz cannot meet the claim recitations calling for:

"said drain pipe fluidically connecting said region around said condenser to said condensing chamber, and said drain pipe having a top end disposed above said condenser, and said drain pipe defining a direct connection to said condensing chamber, ... said drain pipe having an upper end disposed at a level above said condenser." (emphasis added)

Appl. No. 09/655,091
Amdt. dated 4/14/08
Reply to Office action of 1/14/08

The Gaouditz connection between the enclosure 7 and the condensing volume 11 is not direct.

**C. The Fluidic Connection in Gaouditz Is The
Opposite Of The Claimed Fluidic Connection**

In view of the arguments presented by the Examiner in the January 14, 2008 Office Action, Applicant would like to emphasize, in addition to the previous statements, that in the nuclear power plant according to Gaouditz, the condenser 37 is unquestionably located in the intermediate space 10, which forms a condenser chamber as defined therein, and not in the pressure chamber, which contains the reactor pressure vessel 3, 4 within the interior enclosure 7.

Above the duct, bordered by the plate 36, which is also part of the intermediate space 10, it is principally possible, if respective pressure conditions are given, for gases collecting in the vicinity of the condenser 37 - which gases possibly also contain inherently non-condensable parts, even though such a problem is not addressed in Gaouditz - to be guided away from the condenser.

Such gas particles, however, would be transported through the pipe line 31, which dips into the water trap 11, of the intermediate condensation space 10, from the water trap 11 into the pressure chamber (within the enclosure 7). That represents a flow which is exactly the reverse of that which occurs with the apparatus claimed in the instant application.

Appl. No. 09/655,091
Amdt. dated 4/14/08
Reply to Office action of 1/14/08

In order to arrive at the subject matter of claims 1 and 2 of the instant application, a person of skill in the art, while deviating from the teachings in Gaouditz, would:

firstly have to relocate the condenser 37 from the condensing chamber 10 into the pressure chamber with the reactor pressure vessel 3, 4;

secondly have to provide a configuration for the condenser 37 within an upper region of the pressure chamber; and

thirdly have to extend the pipe 31 in such a way that its orifice projecting into the pressure chamber would lie in the upper region of the pressure chamber in the vicinity of the condenser relocated there.

The person skilled in the art would receive no suggestion to do so in view of Gaouditz's configuration and operation of plant components, in which case an alleged combination with the Sawyer reference would not change anything.

Clearly, neither Gaouditz nor Sawyer show:

a condenser disposed in (not merely connected to) a pressure chamber; nor

a drain pipe having a top end disposed above a condenser and defining a direct connection (not through other elements) to a condensing chamber; nor

a configuration capable of a fluidic connection from a region around a condenser to a condensing chamber;

as recited in claims 1 and 2 of the instant application.

It is accordingly believed to be clear that none of the references, whether taken alone or in any combination, either show or suggest the features of claims 1 and 2.

Claims 1 and 2 are, therefore, believed to be patentable over the art. The dependent claims are believed to be patentable as well because they all are ultimately dependent on claims 1 or 2.

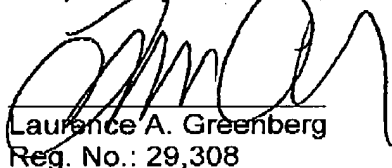
Appl. No. 09/655,091
Amdt. dated 4/14/08
Reply to Office action of 1/14/08

In view of the foregoing, reconsideration and allowance of claims 1-4, 7-10 and 15-16 are solicited. Withdrawn claim 17 has been amended to mention the direct connection of claims 1 and 2 and therefore rejoinder of claims 17-20 under MPEP 821.04 is requested.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate receiving a telephone call so that, if possible, patentable language can be worked out.

If an extension of time is required, petition for extension is herewith made. Any extension fee associated therewith should be charged to Deposit Account Number 12-1099 of Lerner Greenberg Sterner LLP. Please charge any other fees that might be due with respect to Sections 1.16 and 1.17 to Deposit Account Number 12-1099 of Lerner Greenberg Sterner LLP.

Respectfully submitted,



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LAG/lq

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